

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-23 (Canceled).

24. (Currently amended) A method of establishing an adhesive force, said method comprising the steps of:

using a flexible beam to apply a seta to a surface with a force perpendicular to said surface so as to produce a preload an-adhesive force of between about 0.01 and 0.10 grams of ~~said seta~~;

using the flexible beam to orient said seta parallel to said surface while maintaining the preload force; and

using the flexible beam to pull said seta with a force parallel to said surface.

25. (Original) The method of claim 24 wherein said adhesive force is greater than the cumulative force of said applying and pulling steps.

26. (Original) The method of claim 24 further comprising the step of eliminating said adhesive force by creating a force to produce a detachment angle between said seta and said surface.

27. (Original) The method of claim 26 wherein said eliminating step includes a step of creating a force to produce a detachment angle of between about 25° and 35° between said seta and said surface.

28. (Original) The method of claim 26 wherein said eliminating step includes the step of: creating a force to produce a detachment angle of approximately 30° between said seta and said surface.

29. (Previously Presented) The method of claim 24 wherein said flexible beam produces a preload force while maintaining a substantially parallel alignment of the seta with the surface.

30-35 (Canceled).

36. (Currently amended) A method of establishing an adhesive force, said method comprising the steps of:

using a flexible beam to apply a seta to a surface with a force perpendicular to said surface so as to produce a preload an-adhesive force of between about 0.01 and 0.10 grams of said seta;

using the flexible beam to orient said seta parallel to said surface while maintaining the preload force; and

using the flexible beam to pull said seta at a velocity to increase an adhesive force exerted by said seta on said surface.

37. (Currently amended) A method of establishing an adhesive force, said method comprising the steps of:

using a flexible beam to apply a plurality of protrusions on a supporting structure to a surface with a force perpendicular to said surface so as to produce a preload an-adhesive force of between about 0.01 and 0.10 grams of said plurality of protrusions;

using the flexible beam to orient said plurality of protrusions parallel to said surface while maintaining the preload force; and

using the flexible beam to pull said plurality of protrusions with a force parallel to said surface.

38. (Currently amended) A method of establishing an adhesive force, said method comprising the steps of:

using a flexible beam to apply a plurality of protrusions on a supporting structure to a surface with a force perpendicular to said surface so as to produce a preload an-adhesive force of between about 0.01 and 0.10 grams of said plurality of protrusions;

using the flexible beam to orient said plurality of protrusions parallel to said surface while maintaining the preload force; and

using the flexible beam to pull said plurality of protrusions at a velocity to increase an adhesive force exerted by said plurality of protrusions on said surface.

39. (Previously Presented) The method of claims 37 or 38 wherein the supporting structure is a substantially planar substrate.

40. (Previously Presented) The method of claims 37 or 38 wherein the supporting structure is a shaft.

41-50 (Canceled).

51. (New) A method of establishing an adhesive force, said method comprising the steps of:
using a flexible beam to apply a plurality of protrusions on a supporting structure to a surface with a force perpendicular to said surface to produce an adhesive preload force while maintaining a substantially parallel alignment of said plurality of protrusions with said surface; and

using the flexible beam to pull said plurality of protrusions with a force parallel to said surface.